Objectives

Upon completion of this case-based module, the health care professional should be able to:

1. Briefly describe the pathophysiology of depression.

2. List at least three predisposing factors to the development of depression in elder American Indians.

3. Compare the prevalence of depression in older American Indians with that in older non-Indians.

4. Describe the diagnosis, treatment and management of major depression in older American Indians.

5. Describe factors that may pose barriers to the diagnosis, treatment and management of depression in older American Indian populations.

6. Define the Standards of Care for patients with depression according to the Clinical Practice Guidelines established by the Agency for Health Care Policy and Research (AHCPR).

7. Describe pertinent traditional health beliefs and practices that need to be considered in the diagnosis, treatment and management of depression in older American Indians.

Case Study

Joseph Bluecorn is a 73-year-old American Indian and leader of the Ute Indian Nation in Roosevelt, Utah. He is brought to the geriatrics clinic by his two sons for evaluation of multiple complaints, most of which center around pain; he complains of pain "all over." When asked to localize his pain, Mr. Bluecorn points to his abdomen, then to his chest, and finally, he reports that his arthritis is "flaring up" in "all" of his joints. Mr. Bluecorn's sons state that their father has been acting "unlike himself" recently. Of particular concern, he has refused to go to tribal activities in the past two to three months. On one occasion when the sons coaxed him into attending, Mr. Bluecorn was unable to perform his role in the ceremonies, stating that he just "could not remember what he was to do."

Mr. Bluecorn is reluctant to discuss these recent events or his emotions. When asked if he feels "down" or "blue," Mr. Bluecorn's only reply is to look at the floor and shrug his shoulders. With further questioning, however, Mr. Bluecorn finally admits to difficulties "staying asleep," awakening about 3 o'clock every morning and being unable to return to sleep. Furthermore, he admits that his appetite has been poor, that he has lost weight over the past two to three months, and that he is frequently constipated. When asked about his decreased participation in tribal affairs, Mr. Bluecorn indicates that he has just been "too tired and full of pain" to be active. He explains that he has been thinking of relinquishing his role as tribal leader stating, "it is not important to me anymore." He denies suicidal thoughts, replying that "it is unnecessary because I know the Creator is making my ending soon."

Prior to this recent event, Mr. Bluecorn's only medical problems have been adult-onset diabetes (treated with glyburide), gastroparesis secondary to his diabetes (treated with metoclopramide), hypertension (treated with metoprolol), and osteoarthritis (self-medicated with acetaminophen or herbal medications). He has a history of heavy alcohol use (stopped 15 years ago), but after the deaths of his wife and "clan brother" nine months ago, he began drinking one or two glasses of "whiskey" before bedtime. He denies past episodes of depression or other psychiatric disorders in himself or any family members.

Physical examination reveals a sullen-looking older American Indian whose vital signs are normal, with the exception of blood pressure measurements of 156/92 mm Hg (supine) and 136/78 mm Hg (after standing one minute). Findings during the examination are also normal except for a moderately enlarged prostate and his score of 21/30 on the Mini-Mental Status Examination (he answered "I don't know" to the date and day of the week; named only two of three items initially, and recalled none after five minutes; and correctly attempted two serial subtractions of 7 from 100, but then refused to continue). On the Geriatric Depression Scale, he scored 18, indicating moderate depression. Laboratory

evaluation consisting of a complete blood count, serum chemistries, and thyroid- function testing yield unremarkable findings.

Study Guide

1. The physician believes that Mr. Bluecorn is suffering from a major depressive episode. Discuss depression in the older American Indian, focusing on each of the following: a) prevalence, b) risk factors, c) consequences, d) diagnostic criteria, and e) classic presenting signs and symptoms.

   - *What risk factors predispose Mr. Bluecorn to depression?*
   - *Which classic signs and symptoms of depression are present in Mr. Bluecorn's case?*

2. Mr. Bluecorn does not admit to feeling "down" or "blue," and instead of discussing his emotions, he initially complains only of pain. Discuss the difficulties of recognizing depression in the older American Indian, focusing on cultural nuances and the possible variants in the classic presentation of depression that may occur older adults.

   - *What potential influences did Mr. Bluecorn's American Indian culture have upon his interactions with the health care system? With his physician?*
   - *Which of Mr. Bluecorn's symptoms may be linked to a non-classic presentation of depression?*

3. Mr. Bluecorn denies a history of previous depression. Define late-onset depression and compare its etiology, clinical presentation, course, and outcome with depression in early adulthood.

   - *Which features of Mr. Bluecorn's case may be consistent with late-onset depression?*

4. The physician wishes to institute treatment for Mr. Bluecorn's depression. Describe the course of illness for depression, and relate this course to the clinical outcomes and treatment approaches for this disease.

   - *Which clinical outcomes should be considered in Mr. Bluecorn's case?*
   - *How can these outcomes be achieved?*

(continued)

5. The physician is considering various options for the treatment of Mr. Bluecorn's depression. Briefly discuss the role of psychotherapy, medications, and electroconvulsive therapy in the treatment of major depression in older American Indians.

   - *Which initial therapy appears most appropriate for Mr. Bluecorn?*
   - *How should this therapy be individualized for Mr. Bluecorn?*

6. The geriatric team in the clinic wants to insure that their prescribed treatment takes into account and is compatible with the traditional healing practices of the Navajo Ute. Discuss the traditional therapies that may be used in the treatment of depression, and their role in the overall treatment plan for the older American Indian.

   - *What steps can be taken by the geriatrics team to insure the compatibility of their treatment with traditional healing practices for Mr. Bluecorn?*

Discussion

AGING, THE AMERICAN INDIAN CULTURE, AND DEPRESSION

Depression is a common problem in all older Americans. Surveys (without regard to race/ethnicity) report that depression occurs in 2% to 3% of the community-dwelling elderly, and in 10% to 20% of those older adults in acute-care facilities and long-term care institutions. Although similar large scale epidemiological studies in older American Indians are sorely lacking, Manson (1990) found that 32% of Native elders visiting one urban Indian Health Service (IHS) outpatient facility had depressive symptoms (a rate that is dramatically different from the reported rates of elderly whites). Other IHS data on depression in Native elders reveal that depression is the most frequent diagnosis among American Indians and Alaska Natives who seek treatment in mental health facilities operated by the IHS. However, this data should be interpreted with caution for it is estimated that IHS only provides care to approximately *** of the total Native population. Thus, most experts suggest that the prevalence of major depression is high in this population, and in certain tribes, such as the Navajo, the rates may be particularly high. This expectation is based largely upon evidence suggesting that the older American Indian has numerous risk factors which predispose to depression.

What are these risk factors? First, the older American Indian is at risk for depression because of several predisposing factors associated with aging itself. Age-related changes in the central nervous system, such as structural brain changes and increased monoamine oxidase activity resulting in decreased neurotransmitter concentrations, may play a role in the development of late-onset depression (Jenike, 1989; Krishnan, 1993).

Furthermore, depression is a symptom of many diseases that are common in the aging population (Table I) (AHCPR, 1993a; Kalayam & Shamoian, 1992) and it can be induced or worsened by many drugs used by the older patient (Table 2) (Medical Letter, 1994). Other risk factors for depression in the elderly population (without regard to race) include female gender, social isolation (particularly following a spouse's death), lack of social support, and stressful life events (National Institute of Health [NIH] 1991).

Table 1. Medical Problems Associated with Depression*

Addison's disease	Myocardial infarction
Cancer	Myasthenia gravis
Coronary artery disease	Nutritional deficiencies
Dementia	Parkinson's disease
Diabetes mellitus	Renal disease
Fibromyalgia	Rheumatoid arthritis
Huntington's chorea	Stroke
Hyperparathyroidism	Systemic lupus erythematosus
Infections	Temporal arteritis
Lou Gehrig's disease	Thyroid disease
Multiple sclerosis	

* = Highlighting indicates diseases that are of particular significance in older American Indians; refer to the accompanying text for explanation.

Source: References(Kalayam & Shamoian, 1992, Gohdes, Kaufman, and Valway, 1989, and reference for cancer?

Table 2. Drugs Associated with Depression

Acyclovir	Disopyramide	Metrizamide
Alcohol	Disulfiram	Metronidazole
Amphetamine-like drugs (on withdrawal)	Enalapril	Nalidixic acid
	Estrogens	Narcotics
	Ethionamide	Nifedipine
Anabolic steroids	Etretinate	Nonsteroidal anti-inflammatory agents
Anticonvulsants	H_2-blockers	
Asparaginase	HMG-CoA reductase inhibitors	Norfloxacin
Baclofen		Ofloxacin
Barbiturates	Interferon alfa	Pergolide
Benzodiazepines	Isoniazid	Phenylephrine
ß-adrenergic blockers	Isosorbide dinitrate	Prazosin
	Isotretinoin	Procainamide
Bromocriptine	Levodopa	Reserpine
Clonidine	Lidocaine	Thiazides
Corticosteroids	Mefloquine	Thyroid hormones
Cycloserine	Methyldopa	Tocainide
Dapsone	Metoclopramide	Trimethoprim-sulfamethoxazole
Digitalis glycosides		
Diltiazem		

Source: Reference (Medical Letter, 1994)

Several of these age-related risk factors may be of even greater importance in predisposing the older American Indian to depression. For example, the overall prevalence of Type II diabetes mellitus in older Native Americans is 20% versus 8.8% in the general US elder population (Gohdes, Kaufman, Valway, 1989). Similarly, several types of cancer occur at higher rates in the older American Indian than in the non-Indian elderly
(reference ?). (Burhansstipanov, in press) Alcoholism occurs at an alarmingly high rate in some older American Indians (reference ?), and major depression has been found to be secondary to alcoholism, particularly for males (Manson, Shore & Bloom, 1985). The functional impairment that may result from such chronic diseases as well as impairment from acute/episodic illnesses may pose additional risk factors for depression in Native Elders (Baron, Manson, Ackerson & Brenneman, 1989).

Additionally, many American Indian Elders live well below the federal poverty levels and reside in substandard living conditions which also serve as predisposing factors to depression (John, 1994).

The role of death, particularly family deaths, deserves special consideration as a predisposing factor to depression for the older American Indian. The death of a family member is often a major stressful event in the life of any older adult, and as noted above, may predispose the older adult to depression. Older American Indians may be more apt to experience loss due to the death of family members for two reasons. First, the death rate of Natives is higher than among other segments of the United States population because of the high rates of accidents and violence (Minton & Soule, 1990). Secondly, the concept of "family" in some tribes extends beyond mere blood relationships , and is a psychosocial concept derived from a sharing of kindred spirit. "A brother is 'one who feels like a brother,' and a brother so defined in Native culture is no less a brother than a sibling from [biological] parents." (Manson, Beals, et. al., in press.) The American Indian and Alaska Native concept of family may comprise not only the tribal group, but also the familial clan (Minton & Soule, 1990). For example, the Navajo tribe has five major clans. Marriage among these clan members is forbidden for the members are considered to be brothers and sisters. Additionally, tribe and clan members often address elders as "Grandfather" and "Grandmother" without regard to blood relationship (Edwards & Egbert-Edwards, 1990). Consequently, the death of siblings, grandparents, cousins , aunts, or friends are a widely shared experience among some tribes. Given these high numbers of intimate involvements in the community, the number of "family" deaths is higher for the older Native, and the death of any family member may be as emotionally devastating as the death of a spouse (Krammer, 1991). Thus, the older American Indian experiences more frequent deaths of family members, and these repeated emotional assaults may further predispose the older Native to depression.

In addition to age-related factors, older American Indians appear predisposed to depression because of their traumatic history in this

country. Depression in the American Indian is believed to be an outcome of a long history of discrimination, exclusion, and genocidal acts. Older American Indians were stripped of parental and community influence and emotional support when they were sent to boarding schools during their formative years (EchoHawk, 1982). During adulthood, their personal identities were threatened by pressures to conform to bicultural expectations (Manson, Shore, & 1985), and sometimes American Indians lost their traditional identities in the process of acculturation. Because of acculturation, older Natives may feel less valued as important contributors to their culture--a culture that has historically equated old age with wisdom and teaching. The inability of elders to fulfill long-held expectations of instructing the young and advising tribal leaders by relating tribal philosophies, myths, traditions, and stories, may negatively impact their mental health, and predispose them to depression. This phenomenon has been particularly noted among the Coastal Salish Indians of the Pacific Northwest (Jilek, 1981).

Other tribal specific influences which predispose to depression occurs among the Navajo. For example, the incidence of depression among the Navajo is hypothesized to be higher than among other tribes due to unresolved grief stemming from their practice of limiting mourning following deaths to only four days. This limitation is related to a sanction against the expression of anger, especially toward a family member, and their beliefs about the power of the dead to cause illness and adversity in the living
(Shore, Manson, Bloom, Keepers, & Neligh, 1987). Therefore, following the four-day bereavement, the family members are expected to resume their usual routines with no further discussion or emotional expressions of grief (Shore, Manson, Bloom, Keppers & Neligh, 1987). In the Hopi and Plains Indians, Manson and colleagues (1985) have described a phenomenon of "double or complicated depression." It is believed that these and many other Natives may live out their lives in a state of chronic dysphoria. This dysphoria results from the numerous cultural insults discussed above. A new critical event superimposed upon the losses associated with the aging process, previous unresolved crisis, anniversary dates of critical event & alcohol abuse all compound the likelihood of an acute depression in addition to the chronic dysphoria. Finally, while Elders are universally respected among Natives, specific tribes may vary in their treatment of the "frail elderly". For example, the Pueblo Indian's extended family nurtures and protects their Elders, whereas in the Apache Tribe, the care of the Elder who is not self-sufficient is not as commonly provided by the extended family. Furthermore, Minton and Soule (1990) found age discriminatory practices among two Eskimo villages in that the old as well as the young were more likely to be victimized than young and middle age adult groups.

The outcomes of unrecognized and untreated depression in the elderly, regardless of culture or ethnicity, are exceedingly poor. Depression can impair the older person's ability to function, precipitate social loss (e.g., divorce, alienation from family and friends), and trigger

nursing home placement (NIH, 1991). In the dominant White culture in the United States, one-fourth of all suicides are carried out by the elderly population, and depression is the cause of 50% to 70% of late-life suicides (Richardson, Lowenstein,& Weissberg, 1989). Among the elderly, white males have the highest rate of completed suicides (Richardson, Lowenstein, & Weissberg, 1989). Whereas suicide rates vary significantly among tribes and clans, in general, suicide appears to be uncommon in the older American Indian (Byford, 1990). Nonetheless, some studies suggest that depression may indiscriminately increase mortality through as yet unknown mechanisms (NIH, 1991; Koenig & Blazer, 1992).

CASE REVIEW QUESTION

- *What factors predispose Mr. Bluecorn to depression?*

Mr. Bluecorn has several risk factors for depression. In the past nine months, Mr. Bluecorn has suffered the deaths of his wife and one of his "brothers" in his tribal clan. The death of a spouse is a major stressful event in the life of older adults, regardless of race, and as mentioned above, widowhood may predispose the surviving spouse to depression. However, the death of his clan "brother" may be just as significant a personal loss for Mr. Bluecorn as the death of his wife. Additionally, inasmuch as the Navajo culture limits mourning to four days, Mr. Bluecorn may be experiencing depression due to unresolved grief from these deaths. The possible causal relationship between these deaths and Mr. Bluecorn's depression is strengthened by the close temporal relationship of these deaths to his resumption of drinking "whiskey." Furthermore, from a pharmacologic standpoint, alcohol is a well-known central nervous system depressant, and major depression has been found secondary to alcoholism, particularly for male American Indians (Manson, Shore & Bloom, 1985). Mr. Bluecorn also takes metoprolol for the treatment of his hypertension and metoclopramide for the symptomatic relief of his gastroparesis--both drugs can cause or aggravate depression. Finally, Mr. Bluecorn has adult-onset diabetes, and diabetes mellitus is one of the medical illnesses commonly associated with depression. Therefore, Mr. Bluecorn has medical, social, and cultural risks predisposing him to depression.

CLINICAL PRESENTATION AND DIAGNOSIS

The criteria recommended for the diagnosis of a major depressive episode in the American Psychiatric Association's *Diagnostic and Statistical Manual of Mental Disorders, Fourth Edition,* (DSM IV) are the same for all ages and races, and are summarized in Table 3 (American Psychiatric Association [APA], 1994). As can be seen by reviewing these criteria, the dominant symptom is a depressed mood and/or an inability to experience pleasure (i.e., anhedonia). Some suggest that anhedonia is the more common core symptom in the elderly, and this may be particularly true for the older American Indian in as much as some tribes such as the Navajo discourage displays of extreme sadness (Kinzie & Manson, 1987). Although either increases or decreases in appetite accompanied by

likewise changes in weight can occur, weight loss is more common in the older adult (Kalayam & Shamoian, 1992, Blazer, 1989a). Insomnia is also common in the elderly, (Koenig & Blazer, 1992) and in the frail older person, the loss of sleep combined with weight loss may jeopardize their health. (Kalayam & Shamoian, 1992). Physical energy also wanes, and the older adult can become withdrawn, mute, and immobile; in extreme cases, patients may become bedridden (Kalayam & Shamoian, 1992). Agitation is also common in the older depressed patient, (Jenike, 1989; Kalayam & Shamoian; 1992; Koenig & Blazer, 1992) and some can be seen pacing, wringing their hands, or clutching handkerchiefs with frequent expressions of helplessness and hopelessness. Agitation may be so severe as to exhaust the older patient, particularly when combined with weight loss and insomnia (Kalayam & Shamoian, 1992). The Elder may attribute the source of agitation to other things . For example, Elder Navajo women may use a metaphor for self, but ?????? Distractibility, memory loss, and inability to concentrate are common symptoms of depression, and in the elderly, can be confused with early dementia (Jenike,1989; APA, 1994; Blazer, 1989a). As mentioned earlier, the elderly are at high risk for suicide, and even though some depressed elderly have no intention of taking their own lives, they may still be preoccupied by thoughts of death. Finally, depression may be associated with feelings of worthlessness and excessive guilt, but these symptoms seem less common in the elderly than in younger adults (Kane, Ouslander & Abrass, 1994; Moore, 1992).

Table 3. Criteria for Major Depressive Episode

1. Depressed mood and/or loss of interest or pleasure in almost all usual activities and pastimes for most of the day, nearly every day, for at least two consecutive weeks.
2. At least four of the following symptoms are present nearly every day during the same two weeks:
   a. Poor appetite or significant weight loss (a loss of 5% of body weight in one month when not dieting) or increased appetite or significant weight gain;
   b. Insomnia or hypersomnia;
   c. Psychomotor retardation or agitation;
   d. Loss of energy or fatigue;
   e. Feelings of worthlessness, or excessive or inappropriate guilt;
   f. Diminished ability to think or concentrate, or indecisiveness;
   g. Recurrent thoughts of death, suicidal ideation, or a suicide attempt.
3. The symptoms cause significant distress or impairment in social, occupational or other areas of functioning.
4. The symptoms are not associated with mania, and are not solely due to medications, medical conditions, or bereavement.

Source: Reference (American Psychiatric Association, 1994)

The DSM criteria, consists of the use of both affective and physical signs and symptoms. While the physiological symptoms of depression (weight loss or weight gain, insomnia, fatigue, psychomotor retardation or agitation, and recurrent thoughts of death) may be considered to be universal among members of all cultural groups, the same generalization is not valid for the affective symptoms (e.g., dysphoria/sadness, anger, guilt, and irritability). When eliciting a history from a member of a Non-Western cultural group, the clinician should utilize the format described in Appendix I of the DSM IV. It is important to elicit not only the presence or absence of affective changes, but to ascertain the intensity and duration of the symptoms as well as the impact they are having on the individual's ability to function. For example, the presence of dysphoria in the Hopi culture may only become problematic when it begins to interfere with one's ability to fulfill social expectations (Manson, in press).

Although the American Psychiatric Association's approach to the diagnosis of mental illness (when the diagnosis is used without consideration of cultural context) has been criticized by some (Manson, 19--), understanding and adhering to these criteria may at least minimize the misdiagnosis of depression in the elderly, particularly in the older American Indian. As suggested in the fourth criterion (Table 3), other causes must be investigated and ruled-out before symptoms are attributed to depression. For example, insomnia is a very common, yet nonspecific symptom, in the elderly. Although it is one of the key symptoms in depression, a variety of factors may underlie this complaint such as obstructive sleep apnea, secondary to diseases that affect the respiratory centers of the brain, orthopnea and nocturia caused by congestive heart failure, abdominal discomfort from reflux esophagitis, anxiety and restless from hyperthyroidism, alcohol withdrawal, grief, transient situational anxiety, and other events. (Kane, Ouslander, & Abrass, 1994). Older American Indians may speak of sleep disturbances caused by repetitive disturbing dreams. For some Native Tribes, dreams are perceived as equivalent to being in a waking state and the ghost or spirit is real. It is however essential to understand the meaning and beliefs about dreams and hallucinations in the context of one's tribal heritage. In some tribes, dreams may be viewed as either comforting or threatening. The latter ones fill the person with a sense of dread or impending doom. In some Indian cultures (e.g., Mohave, Navajo, Salish), these repetitive disturbing dreams are considered to be part of the ghost illness process (Putsch, 1988) and may or may not be indicative of depression. Similarly, other symptoms must be interpreted within the context of the American Indian culture. If culture is ignored, various forms of Indian sickness of mind or spirit may be mistakenly equated with depression. For example, the Hopi illness categories or contextual states of being include "worry sickness," "unhappiness," "heartbroken," "drunken like craziness with or

without alcohol," "disappointment," and "pouting" (Manson, Shore & Bloom, 1985; Minton & Soule, 1990). Each of these constellation of symptoms may fulfill some, but not all, of the DSM IV criteria for a major depressive episode, and therefore, should **not** be equated with depression.

It is noted in the DSM IV that individuals with major depression may present with associated features and disorders in addition to those symptoms mentioned in the criteria. Specifically mentioned are tearfulness, irritability, brooding, obsessive rumination, anxiety, phobias, excessive worry over physical health, and complaints of pain (APA, 1994). The latter two of these will be discussed further under the topic of "masked depression," but several other symptoms appear particularly significant in the presentation of depression in the older American Indian. For example, Neligh and Scully (1990) report that agitated anger and irritability is not an uncommon picture of major depression in the Indian elderly. Similarly, they note that anxiety is a frequent diagnostic dilemma for clinicians working with Indian elderly, and in their experiences, major depression is one of the most common causes for this symptom among Indian people.

The severity of the depressive episode may be classified according to guidelines established in DSM IV. Mild depression is characterized by the presence of only a sufficient number of depressive symptoms to establish the diagnosis, and the symptoms cause little or no disability (although considerable effort may be required to maintain normal function). In contrast, severe depression is characterized by the presence of most or all of the symptoms mentioned in the criteria, and the magnitude of these symptoms causes obvious incapacitating disability (i.e., the majority of symptoms must be present for the majority of each day or all day for a period of at least two weeks). Moderate depression is defined as intermediate between mild and severe in terms of the numbers of symptoms and the degree of disability or distress caused by the disease (APA, 1994).

In the DSM IV, severe depression can be further classified based upon the presence or absence of psychotic features (APA, 1994). Although either delusions or hallucinations can occur in psychotic depression, delusions are most common in the elderly and other psychotic features are rare (Kalayam & Shamoian, 1992; Blazer, 1989b). The relative absence of hallucinations associated with depression in the elderly is particularly significant when interpreting symptoms in the older American Indian. Hopi women, for example, may invite images of the dead through a self-induced trance as part of the normal mourning process (Nagel, 1988). Similarly, auditory hallucinations of hearing the voices of deceased relatives are common among women of the Pueblo, Plateau and Plains tribes (Shore, Manson, Bloom, Keepers & Neligh, 1987; Manson, Shore & Bloom, 1985). Most of these hallucinations are not viewed as abnormal in the cultural context of these particular tribes. They do not interfere with function (Manson, Shore & Bloom, 1985), and more importantly, their

presence carry no pathologic connotation. However, similar experiences among the Navajo may have ominous pathological connotations (Nagel, 1988). **This is one reason among many that dictate the need for clinicians to have an understanding of the cultural variations and the cultural nuisances of disease symptoms. Failure to take the patient's beliefs or concerns into account may lead to misdiagnosis and the wrong treatment**. It is conceivable that the uninformed clinician may construe things like auditory hallucinations as representing a psychosis and insist on expensive and potentially unnecessary in-patient hospitalization or outpatient therapy when it may be more beneficial for the individual to participate in a culturally appropriate traditional healing modality.

On the other hand, depression with delusional features (delusional depression) is not infrequ ent in the elderly. In fact, about one-half of elderly patients who develop major depression for the first time after age 60, experience delusions (Blaser, 1989a). Older patients often have paranoid delusions (e.g., vindictive relatives, punishment for previous wrongdoing), somatic delusions (e.g., cancer, body "rotting" away, strange body odors), or nihilistic delusions (e.g., personal or worldwide destruction) (Kalayam & Shamoian, 1992; Blazer, 1989b). In addition, delusions of nonexistence of the self, or parts of the self, are common in late life depressive episodes.
(Blazer, 1989a). Nonetheless, once again it is important to examine these symptoms in the context of individual health beliefs for in some instances, these delusions could be perceived as being caused by spirits or ghosts (Nagel, 1988; Putsch, 1988).

It is important to note that the DSM IV criteria are just one of a number of diagnostic aids to assist in the diagnosis of Depression

CASE REVIEW QUESTION

- *Which classic signs and symptoms of depression are present in Mr. Bluecorn's case?*

Mr. Bluecorn displays several classic symptoms of depression. He expresses a lack of interest in, and enjoyment of his leadership role (anhedonia), and complains of being "too tired" to be active in his tribal affairs (fatigue). When his sons coaxed him into attending a ceremony, Mr. Bluecorn was "unable to remember what he was to do," and his incorrect answers on the Mini-Mental Status Examination may indicate that he has impaired concentration and memory lapses. Although Mr. Bluecorn denies overt suicide ideation, he has been contemplating his own death and voices his belief that death is imminent by "other" means. Finally, he admits to difficulty staying asleep (early-morning awakening), anorexia, and weight loss. All-in-all, Mr. Bluecorn has at least seven depressive symptoms, and these symptoms appear to impair his ability to function in social and tribal activities to a moderate degree, but at the present time, are not severe enough to require in-home care or

hospitalization. Of course, before the formal diagnosis of depression can be made, his physician should ascertain through history and appropriate testing that these symptoms are not caused **solely** by bereavement, medications or other medical problems. such as a sequelae of his previous alcohol abuse.

UNDERRECOGNITION OF DEPRESSION IN THE OLDER AMERICAN INDIAN

Depression is often unrecognized in the elderly population (NIH, 1991; Butler, Ballenger, & Glassman, 1993) particularly in older American Indians. Numerous reasons have been advanced to explain this problem. A few experts suggest that clinicians and some elderly patients may incorrectly accept depression as part of the normal aging process (Butler, Ballenger & Glassman, 1993) and thus not recognize it as a treatable disease worthy of diagnosis. Ageist myths both in health professionals as well as the lay public of the dominant culture may contribute to underrecognition of depression in elders of all cultures; however, older Natives do **not** accept depression as part of the normal aging process. **They may in fact call it something else.** A more important reason for underrecognition in older American Indians is the stigma related to mental health problems which is pervasive in their culture, and thus, many older Indians may be reluctant to seek medical intervention for mental health problems such as depression (Kramer, 1981). This reluctance may also be due to mistrust or lack of trust in their health care providers that has resulted from previous undesirable treatment (e.g.,rude, discounting, demeaning behavior), a lack of provider understanding of the social, cultural, and economic conditions that are unique to Natives, the lack of shared meaning or ignorance on the part of the provider about their different communication styles. An additional reason that depression may be underdiagnosed in Native elders is the cultural variations in the phenomenology and language of emotions that can affect the presentation of depression. For example, the Navajo culture expressly forbids displays of sadness or sorrow beyond the four days of mourning discussed earlier. In other tribes, there are no semantic equivalents for the words depression and mental health (Manson, Shore, & Bloom, 1985; Minton & Soule, 1990). Consequently, various forms of Indian "sickness" of mind or spirit as described by Native elders may be mistakenly equated to the DSM IV criteria for depression. These DSM IV descriptions may not always bear cultural relevance (see Appendix I of the DSM IV criteria). For example, Hopi women may speak of "worry sickness", "unhappiness",
"heartbroken", "drunken like craziness" with or without alcohol, and "disappointing" or "pouting." Each of these may be associated with a cluster of cognitive, affective, or behavioral states characterized by distinctive etiologies and treatments.

Appendix I of the DSM-IV is entitled, "Outline for Cultural Formulation and a Glossary of Cultural - Bound Syndromes." The information in this appendices is intended to supplement the multiaxial diagnostic

assessment and to address difficulties that may be encountered in applying the DSM IV criteria in a multicultural environment (APA, 1994). **The outline recommends a four pronged systematic approach to glean an understanding and appreciation of one's cultural background and context, particularly, as they relate to the provision of care. The outline includes the following: Inquire about the individual's cultural identity, ascertain cultural explanations of the individual's illness, note cultural factors related to their psychosocial environment and their level of functioning, and utilize the information to formulate a cultural assessment for the purpose of arriving at a relevant diagnosis and formulating a plan of care.**

When asking about the cultural reference group, it is important to note the level of involvement with members of their ethnicity, as well as the degree of acculturation into the dominant society. In addition, inquire about the person's primary language, and their fluency with spoken and written English. The second item of the approach requires the clinician to ascertain how the individual might explain their symptoms to a member of their family or cultural group in order to be understood. This process will assist the health care provider to develop a perspective about the meaning of the illness, the impact on their ability to function, and the perceived cause (i.e., spirits, curses, cultural digressions etc.). The third tenet of this approach requires the provider to note culturally derived social stressors or supports (e.g., the role of the family, religion and the tribe). The fourth point provides an opportunity for both the provider and the patient to explore their differences in cultural background, beliefs, and practices in order to negotiate the foundation of a therapeutic relationship. Finally, the clinician will utilize all of the information to mutually design and establish a culturally relevant plan of care that may include traditional healing modalities.

Another reason that older American Indians may be reluctant to seek medical assistance is because of the high value their culture places upon stoicism, and thus, unless families bring the older person into the health care system, and in some cases, speak on behalf of them, depression is unrecognized (Neligh & Scully, 1990). Furthermore, the current reimbursement system has also been implicated as a cause for the underrecognition of depression because the diagnosis of psychiatric disorders is a time-intensive process which is not financially supported by Medicare (Butler, Ballenger, & Glassman, 1993). The issue of time becomes even more significant in the diagnosis of mental illnesses among older American Indians, in part, because of culturally-determined communication styles that require a longer, more conversational intake with American Indians than with patients from other cultures (see forward for more discussion of communication) (Manson, Culture and the DSM IV). However, perhaps the reason most commonly cited for the underrecognition of depression in both the general elderly population and in older Natives is more intrinsic to the disease process itself--that is, the nature of depressive symptoms in the older person makes recognition and

appropriate interpretation more difficult (Butler, Ballenger, Glassman, Stokes & Zajecka 1993; Jenike,1989; NIH, 1991).

Many depressive symptoms in an older person, regardless of cultural background, may be incorrectly attributed to other causes. For example, sleep disturbance is characteristic of depression and can help to make the diagnosis in a younger patient, but it is harder to evaluate as a symptom of depression in an elderly person who may have pre-existing insomnia or other medical illnesses that could cause sleeping problems (Butler, Ballenger, & Glassman, Stokes & Zajecka 1993). Similar problems exist for other depressive symptoms such as loss of appetite, decreased concentration, or fatigue. In fact, the aging process itself is associated with alterations in sleeping and eating, and thus, the physician and patient may be tempted to consider changes in these as the "normal" consequence of advancing years (Blazer, 1989b; NIH, 1991). Finally, issues as to whether the patient continues to participate in previous pastimes or hobbies can be easily identified in a younger patient, but in an older person, it is often more difficult to attribute these problems to depression when existing health problems or frailty may offer reasonable alternative explanations (Butler, Ballenger,& Glassman, Stokes, & Zajecka, 1993).

In Native elders as well as older adults in the dominant culture, the presence of depression may be overlooked because an accurate diagnosis may be complicated by the presence of multiple complex illnesses, prolonged and unresolved grief that may be thwarted by cultural customs as well as the presence of higher rates of alcohol abuse. One of the most common presentations for depression are multiple somatic complaints. These complaints may never be completed evaluated due to ageist attitudes of the providers (i.e., "all old people complain about everything").

CASE REVIEW QUESTION

- *What potential influences did Mr. Bluecorn's American Indian culture have upon his interactions with the health care system? With his physician?*

(To be completed by ? after the revision of the case)

NON-CLASSIC PRESENTATIONS IN THE OLDER AMERICAN INDIAN

Another reason that depression may be more difficult to recognize in the older adult is that depression may present differently in the elderly (Blazer, 1989; Jenike, 1989b; NIH, 1991). At least two variants of the classic presentation of depression are generally described in relation to the older patient--masked depression and pseudodementia. Both may occur in the older American Indian, and in particular, masked depression

may be quite common (Neligh & Scully, 1990). Masked depression describes a syndrome in which the dysphoric mood is hidden or "masked" by the patient's complaints of and preoccupation with physical symptoms (Kane, Ouslander, & Abrass, 1994; Krishnan,1993). These physical symptoms may be referred to as "depressive equivalents." Pain is a common depressive equivalent, as are nonspecific complaints of cardiovascular, gastrointestinal, respiratory, musculoskeletal, or genitourinary origin
(Kalayam & Shamoian, 1992) Social withdrawal and apathy may be other depressive equivalents in the older adult (Kalayam & Shamoian,1992; Moore, 1992).

Masked depression may be common in the older population, particularly in older American Indians, because of their generation's reluctance to discuss personal feelings and emotions (especially those that may be interpreted as weaknesses) with strangers and authority figures such as physicians. Older American Indians' descriptions of symptoms may also be strongly influenced by their culture; it may be more culturally acceptable to complain of sick livestock or failing crops than to admit to one's own emotional disturbances. Therefore, rather than complain of unhappiness, older Indians may describe physical discomfort, become apathetic and withdrawn, or use imagery to express sadness. In the event that the elder is brought to the clinic by family members, his loved ones may relate that the elder has been angry, agitated, irritable or they may report that he/she has had a personality change. As patients recover from their depression, depressive equivalents gradually improve or become increasingly less prominent among their complaints (Kalayam & Shamoian, 1992). Unfortunately, too often the underlying depression is **not** diagnosed, and the patient's somatic complaints will be treated as part of some other medical problem(Butler, Ballenger, Glassman, Stokes, & Zajecka, 1993; NIH, 1991).

Cognitive dysfunction which can be mistaken for dementia can also occur within the context of a major depressive episode (AHCPR, 1993; Blazer, 1989a; 1989b, Jenike, 1989). This syndrome is frequently referred to as "pseudodementia," the dementia syndrome of depression, or depressive dementia (Kalayam & Shamoian, 1992). Similar to true dementia, deficits associated with depressive dementia usually involve memory, attention span, and concentration, and can be severe enough to impair the patient's ability to function (Kalayam & Shamoian, 1992). Patients who have depressive dementia make as many errors on formal mental status tests (e.g., Mini-Mental Status Examination) as do patients with true dementia.[1] However, patients who have depressive dementia

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[1] Many neuropsychiatric tests have not been standardized for use among older American Indians, and thus may yield unreliable results, particularly if English is not the primary language spoken by the patient. Mental status examination questions may also be culturally biased, particularly those that measure verbal skills and fund of information. As a result, the clinician must rely on a high index of suspicion that a depressive illness may be responsible for changes in mental status (Neligh and Scully, 1990).

usually make no attempt to answer questions (respond "I don't know") and highlight their memory problems ("See, my memory is gone!"), whereas patients with true dementia often confabulate answers (Koenig & Blazer,1992). In addition, the cognitive dysfunction of depressive dementia appears suddenly, usually after the onset of depressive symptoms, and follows a fluctuating, short-lived course (Jenike, 1989; Koenig & Blazer, 1992). When appropriately treated, the cognitive deficits of depressive dementia usually fully abate; however, in some older adults, the depressive episode may be the initial presentation of irreversible dementia (APA,1994; Jenike, 1989; Koenig & Blazer, 1992).

It is important to include some words of caution about the use of standardized instruments to screen for the presence of depression or impairment in mental status. In the dominant culture, it is common practice for clinicians to utilize such instruments as the Yesavage Geriatric Depression Scale, the Beck Depression scale or the Center for Epidemiologic Studies (CES-D) to screen for the presence of depressive symptomology, and the Folstein Mini Mental State Exam to screen for impairments in cognitive function. However, it should be noted that these instruments have not be developed nor their use widely tested in minority or Non-Western cultures. Of the tools listed above only the CES-D has been tested and found to have validity in Native elders. To date, there have been two studies that have examined the use of the CES-D to screen for depression in American Indians with chronic diseases and impairments in their Activities of Daily Living (ADL's) (Baron, Manson, Ackerson & Brenneman, 1990; Beals, Manson, Keane & Dick, 1991). This is particularly significant for it is well recognized that the onset of physical health problems, especially debilitating ones are a major cause of depression in older adults of all ages. The NICOA (1981) data revealed that 73% of older American Indians were mildly to totally impaired in their ability to cope with their Activities of Daily Living (bathing, dressing, feeding, continence or grooming). When the impairments imposed by these chronic health problems are coupled with the other losses and traumatic events of advancing age, it is easy to understand how an elder may experience higher rates of depression.

Baron, Manson, Ackerman & Brenneman (1990) in their study found the CES-D to be a highly valid instrument to screen for depression in elder American Indians even in the presence of multiple chronic and debilitating diseases. This is particularly noteworthy because both acute and chronic illnesses constitute some of the largest health problems faced by American Indian elders. The impact of these diseases are evidenced by an increased rate of disability, impairments in their ability to carry out Activities of Daily Living and thus higher rates of depression. These researchers believed that these circumstances may complicate the clinicians ability to distinguish between somatic complaints resulting from the impairment, and those that may be attributed to depression.

The CES-D is a twenty item scale that inquires about the frequency with which various cognitive, affective, and psychophysiological symptoms

associated with depression have occurred within the week prior to the administration of the tool. Algorithms have been developed to transform the CES-D responses into approximate DSM III diagnoses (Noh, Wood & Turner, 1984).

The usual cut off score is 16, but some researchers have found this to be problematic. Baron, Manson & Brenneman (1990) have suggested a score of 24 has a higher associated sensitivity of 100% and a specificity of 85%.

It is important to understand the limitations of standardized screening instruments that have been developed for use in the dominant culture, but never widely studied for application in minority cultures.

Changes in Mental Functioning

Most psychological testing has been standardized based on experiences of the White population. Even when Indians and Natives speak and read English, standardized instruments may be problematic due to questions being culturally incomprehensible, unacceptable, irrelevant, or too ethnocentric to illicit complete answers (Manson, Beals, et. al., in press). For example, a question that asks about "feeling as if you are going mad" may be interpreted as a question about anger rather than one's sanity. Direct question about sexual behavior or abuse of peyote may be unacceptable. A question about help-seeking behaviors that does not include seeking help from a traditional healer may result in an incomplete answer. Use of standardized tests without recognition of cross-cultural aspects can result in both under-and-over reporting of symptoms and syndromes (Neligh & Scully, 1990).

Only recently have studies been conducted to examine the performance of diagnostic instruments with non-White cultures. Although results are not generalizable to all American Indian and Alaska Native tribal groups, a number of cross-cultural deficiencies have been identified for the Diagnostic and Statistical Manual of Mental Disorders (DSM), the Center for Epidemiological Studies Depression Scale (CES-D), the Minnesota Multiphasic Personality Inventory (MMPI), the Diagnostic Interview Schedule (DIS), and the Schedule for Affective Disorders and Schizophrenia - Life-time Version (SADS-L).

An assumption underlying the DSM calculus is that mood and symptom experiences are on a continuum that is unidimensional, linear, and additive in nature (Manson, 19__-in DTSD DSMIV). However, recent study results indicate that the threshold at which "normal" is demarcated from "abnormal" varies not only by gender but also by culture. Consequently, a higher prevalence of major depressive symptoms between the genders or among cultures may be due to gender and cultural variations in the intensity and severity (i.e., experiential level) of the symptoms rather than due to a higher rate of the disorder. Additionally, the normal-abnormal threshold related to the duration of

symptoms (e.,g., depressed mood and/or loss of pleasure...for at least two consecutive weeks) may vary by culture. For instance, among the Hopi tribe sadness is so widespread that no one may be concerned until an individual fails to meet deeply ingrained social expectations. The DSM also is not reflective on non-Western cultures because it is based on Western normative mind/body dualism. In non-Western cultures, people may not differentiate somatic from affective complaints even when the culture possesses elaborate lexicons about emotional states. Indians and Natives often emphasize the wholeness of psyche and soma combined with the concept of spiritually.

The CES-D, a 20 item scale which assesses the occurrence and persistence of depressed mood, feelings of guilt and worthlessness, psycho-motor retardation, loss of appetite, and sleep disturbance in the past week, has been examined for its performance in the English language with American Indians including the elderly (e.g., Manson, Ackerson, Dick, Baron & Flemming, 1990; Baron, Manson, et. al., 1989; Beals, Manson, Keane & Dick, 1991). The focus of the studies has been on the different factor structures. The correlation between depressed affect and somatic complaints was found to be high enough to warrant the recommendation that with many American Indian tribes the two factors (depression & somatization) may need to considered indistinguishable (Manson. 199_, in DSMIV). In a study of Pacific Northwestern elderly American Indians with chronic disease, a CES-D cutoff score of 24 rather than 16 was found to be necessary to reduce the number of false positive (Baron, Manson, Akerson & Brenneman, 1989).

The specificity of the MMPI with American Indians is questionable. In a study that examined the performance of the MMPI with American Indians in the Northwest, the instrument was unable to differentiate between patients who were well and those who suffered from a major illness (Pollack & Shore, 1980).

The Diagnostic Interview Schedule combines concepts of guilt, shame, and sinfulness in one question whereas the 23 bilingual Hopi healthcare professionals and paraprofessionals who served as informants in a study (Manson, Shore & Bloom, 1985) **clearly distinguished** each of these concepts from the other. Two recommendations were made by the Hopi study informants about the questions on the DIS. First, three separate questions should be used so as not to conflate the three concepts. Second, questions related to sexual behavior. Other revisions include: eliminating unintelligible words or phrases such as "blue" as a descriptor of dysphoria, adding, traditional healer to the list of professionals to whom one might talk to about emotional problems, and adding herbal and magical preparations as forms of medication or therapy.

Schedule for Affective Disorders and Schizophrenia-Life-time, a semistructured diagnostic interview designed to rule diagnosis in or our according to Research Diagnostic Criteria (RDC), was assessed for

reliability and validity in three American Indian reservation communities representing the Plains, Plateau and Southwest culture areas (Manson, Walker & Kivlahan, 1987; Shore, Manson, Bloom, Keepers & Neligh, 1987). [More complete histories of physical illnesses and personal losses were found to be necessary modification to the instrument], One study also revealed that a core depressive syndrome exists across the three tribal groups (Shore, Manson, Bloom, et al., 1987).

FINISH THE DISCUSSION

CASE REVIEW QUESTION

- *Which of Mr. Bluecorn's symptoms may be linked to a non-classic presentation of depression?*

Mr. Bluecorn's initial presentation to his physician is consistent with masked depression. At first, his sole complaints were of pain, and even when directly asked (**SPERO, I HAVE SOME CONCERNS ABOUT THE USE OF DIRECT QUESTIONING. IT** SEEMS TO ME THAT THE DIRECT QUESTIONING APPROACH IS PART OF THE PROBLEM HERE.), Mr. Bluecorn did not admit to having a depressed mood. This reluctance to discuss emotions is not uncommon among older American Indians who will often not respond or respond in the negative to direct questions about being depressed (Neligh & Scully, 1990). As mentioned above, pain is a common depressive equivalent in masked depression. A key finding in Mr. Bluecorn's case is the nonspecific presentation of his pain (i.e.,"all over," sometimes his abdomen, other times his chest or arthritis). When a patient's complaints do not fit a recognizable pattern, or when chronic pain is a component, depression should be suspected and the relevant criteria investigated (Jenike, 1989).[0]

Although perhaps not as striking as Mr. Bluecorn's complaints of pain, his presentation also resembles pseudodementia. For example, he scored 21/30 on the Mini-Mental Status Examination, and although this test has not been validated for use among older American Indians, his performance is consistent with his explanation of his inability to take part in tribal ceremonies because of memory loss. Furthermore, as is often characteristic of patients with cognitive deficits resulting from depression, Mr. Bluecorn highlights his memory loss and makes no attempt to answer questions (i.e., answers "I don't know").

LATE-ONSET DEPRESSION

Late-onset depression (also known as late-life depression) refers to major depression that appears for the first time after the age of 60 years (Kalayam & Shamoian, 1992; Koenig & Blazer, 1992). Although late-onset depression is not recognized as a separate category in DSM IV, some evidence suggests that depression first appears in late-life differs in etiology, presentation, and outcome from depression in earlier ages

(Kalayam & Shamoian, 1992; NIH, 1991). For example, compared with depressive episodes of earlier onset, late-onset depression appears to be less closely linked to a genetic inheritance. Furthermore, the genetic predisposition to depression particularly for bipolar disease has not been well studied in America Indian and Alaska Natives. Health care providers on Indian reservations have been known to make anecdotal reports of familial occurrence of depression, but a clear genetic preponderance has not been scientifically studied. Depression is more likely related to medical illnesses (Koenig & Blazer, 1992), particularly neurological diseases, although cardiovascular, endocrine, and nutritional disorders have been implicated (Kalayam & Shamoian, 1992). Late-onset depression is more likely to present with delusions, cognitive deficits, and somatic complaints than is depression in early years (Koenig & Blazer, 1992). Although relapse and recurrence of depression are likely regardless of the age of inception, late-onset depression appears to have higher relapse and recurrence rates when compared with those of earlier-onset depression (Kalayam & Shamoian, 1992; NIH, 1991). Some evidence suggests that late-life depression is also associated with higher mortality rates (NIH, 1991).

CASE REVIEW QUESTION

- *What features of Mr. Bluecorn's case may be consistent with late-onset depression?*

Many features of Mr. Bluecorn's case appear to be consistent with the syndrome of late-onset depression. As mentioned above, somatic complaints are frequently associated with this depressive syndrome, and Mr. Bluecorn's initial complaints centered around pain rather than his mood. Late-onset depression may also present with cognitive deficits, and Mr. Bluecorn's formal mental status testing revealed deficits in short-term memory (i.e., inability to remember three words after five minutes) and concentration (i.e., failure to correctly subtract serial sevens). Further evidence of his cognitive deficits comes from his history of being unable to participate in the tribal ceremonies because he "could not remember what to do." Late-onset depression appears to be closely linked to medical illnesses, and Mr. Bluecorn has diabetes and hypertension; both endocrine and cardiovascular diseases have been associated with this depressive syndrome, albeit not as strongly as neurological disorders. Finally, by definition, late-onset depression begins after age 60, and Mr. Bluecorn denies a history of depression. Of course, previous depressive episodes might have been unrecognized in Mr. Bluecorn, and if this were true, his current episode would be more consistent with a recurrence of depression. But, presuming his history is accurate, Mr. Bluecorn's current depression bears most of the features which are characteristic of late-onset depression.

COURSE OF ILLNESS AND IMPLICATIONS FOR TREATMENT

Untreated depressive episodes in young and middle-aged adults can last at least six months (Koenig & Blazer, 1992) whereas episodes of depression in late life may last even longer (Blazer, 1989b; Kalayam & Shamoian, 1992; Koenig & Blazer, 1992). Not all sources agree on this point (APA, 1994). Relapse, defined as a worsening of symptoms after improvement or a return of symptoms within six months of the acute episode (AHCPRa, 1993a) is more characteristic of older depressives than of their younger counterparts (Kalayam & Shamoian, 1992). After one or more symptom-free years, more than 50% of patients experience another episode/recurrence (AHCPRa, 1993a). The presence of another mental disorder, a chronic medical condition, or chronic affective symptoms increases the rate of recurrence, as does older age at onset of the first episode (Kalayam & Shamoian, 1992). Also, because the time between episodes decreases with increasing age, an older individual usually experiences more frequent episodes of depression (Blazer, 1989b; Kalayam & Shamoian, 1992) and a higher rate of chronicity (Blazer, 1989b; Koenig & Blazer, 1992). A high rate of chronic depression or double depression has been reported for some American Indian tribes (Jilek, 1981; Shore, Manson, Bloom, Keepers & Neligh, 1987).

Based on the course of illness, several clinical outcomes are usually appropriate considerations. Of course, for each acute episode, the major clinical outcome is to eliminate or reduce the symptoms of depression, and thus minimize morbidity and, hopefully, prevent death. Because the risk of relapse is high after the resolution of the acute episode, the desired clinical outcome should be to prevent early return of the disease, and this is achieved with "continuation" therapy. Continuation medication therapy should extend four to nine months after remission of symptoms (AHCPR, 1993b). Finally, for those patients who have a high risk of recurrence or suffer from severe episodes, the desired clinical outcome should be to prevent or minimize the frequency of future episodes. "Maintenance" therapy at the optimal therapeutic dosage aims to prevent a recurrence, and lasts one or more years (AHCPR, 1993b). Some authorities recommend lifelong maintenance therapy for patients in whom the risk of recurrence is greatest, such as those whose first episode occurs after the age of 50 (Greden, 1993).

CASE REVIEW QUESTIONS

- *Which clinical outcomes should be considered in Mr. Bluecorn's case?*
- *How can these outcomes be achieved?*

The health care provider treating Mr. Bluecorn should consider three clinical outcomes for the treatment of this depressive episode: 1) to eliminate or reduce Mr. Bluecorn's symptoms, 2) to prevent relapse, and 3) to prevent recurrence. The latter two outcomes are important considerations inasmuch as Mr. Bluecorn's advanced age increases his risk for relapse and recurrence. Therefore, the health care provider may recommend acute, continuation, and maintenance medication therapy to Mr. Bluecorn for the treatment of his depression.

TREATMENT OPTIONS

Formal treatments for major depressive disorders are categorized into three domains: psychotherapy, medication, and electroconvulsive therapy (ECT). Each will be briefly discussed below with regard to the treatment of the elderly and older American Indians.

PSYCHOTHERAPY

Psychotherapy refers to a broad category of interventions whose common method is a form of talk therapy. Within all psychotherapies, a relationship is formed between one person seeking help and another person who is identified as having the knowledge and skills useful to resolve problems in living as well as seriously debilitating mental dysfunctions. An array of psychotherapeutic modalities have been shown to be effective in treating depressed elders, but there are no outcome studies testing their efficacy with older American Indians. Indeed, the traditional outcome study research methodology would be very difficult to implement with clinical integrity in the AI culture because it requires therapists to follow a clinical manual that limits flexibility to structure the therapy in an individualized manner. The treatment modalities tested in other populations should be assumed to have similar potential efficacy with AI's when implemented with appropriate modifications.

As with any age group, psychotherapy with American Indians must be initiated with awareness of the cultural contexts of both the disorder and the intervention. As described above, different tribes of AI's describe depression very differently (Trimble, Manson, Dinges, & Medicine, 1984). Therefore, they can be presumed to experience and explain the causes quite differently. Different explanations likely lead to different expectations about effective intervention as well. Therapists also need to know the financial, social, familial, and spiritual resources available to their clientele within the local community. Naive assumptions about living conditions, family structures, or transportation availability can blind a therapist to concerns and constraints that will affect the design and implementation of an intervention.

Psychotherapy depends heavily upon an effective relationship. Most AI tribal cultures expect helpers to have established credibility as humans first, and experts second (LaFromboise & Dixon, 1981).

Therapists must consciously monitor the initial interaction to ensure that it fully establishes mutuality between therapist and client. Therapists especially should monitor closely their non-verbal cues through which the client will identify the therapists' openness to mutuality, especially mutual respect (LaFromboise, Trimbel & Mohatt, 1990). Specific behaviors such as deferring eye contact, offering choice of a chair, pacing the interaction to allow the client to formulate a thought before expecting an utterance are the types of behaviors through which the client will decide whether respect and mutual humanness can be trusted. Clients especially may test non-AI therapists to see if they truly respect the culture and its practices. Even the most trustworthy non-AI therapists may still be excluded from certain levels of inclusion in the tribal activities and beliefs. Therapists must establish an openness to traditional cultural ideas and practices (especially the client's beliefs about the problem and its solution), seeking to integrate their own knowledge and skills into a culturally appropriate framework (Lewis, 19). Obviously, therapists must fit within a culturally acceptable framework for helpers in order to have a viable role as a "sanctioned healer" (Frank, 1974). The context in which therapy occurs may vary depending on the client's or the tribe's beliefs about how and where healing should occur. In addition to tracking the external environment and their overt behavior, therapists must monitor their own countertransference issues that may lead them to overinvest in the client or to be patronizing.

As described above, AI elders vary tremendously in the extent to which they have been assimilated into mainstream culture. Psychotherapists must identify the degree of acculturation of each client because the differences between traditional and fully assimilated AI's is sufficient to impact treatment goals and strategies (Red Horse, Lewis, Feit, & Decker, 1978). Elders who remain fully assimilated into tribal culture are most likely to respond to interventions that come from within the cultural frame and practices. Those who are fully assimilated into the mainstream are more likely to be open to the traditional models of psychotherapy. Elders whose identity rests between these two options are in many ways most challenging because they have a personally unique blend of traditional and mainstream cultural ideas. Identifying the specific beliefs and preferences of the latter group requires ongoing monitoring by the therapist to ensure that the intervention model is congruent with the client's identity, which itself may be evolving in the course of the therapeutic work.

Specific treatment modalities that have demonstrated efficacy for depression in older adults within the majority culture include behavioral, cognitive, cognitive-behavioral, brief psychodynamic, group, interpersonal and psychosocial therapies (Niederehe, 1994; Teri, Curtis, Gallagher-Thompson & Thompson, 1994). Generally, the success rate of these well-defined therapies is similar for younger and older clients. Some modifications of the treatment modalities may be needed with older adults, including increased repetition of specific steps, shorter sessions, use of multiple sensory modalities, and different use of language.

In general, the same range of therapies considered useful with any older adult depressed person is appropriate to consider for American Indian elders. However, cultural uniqueness requires adaptation. Several clinicians recommend that the therapies focus on the present rather than past, rely less on insight than action, and are, of course, culturally consistent. Therapies that require significant amounts of self-disclosure about private thoughts and feelings are asking for something that cannot be delivered to the non-Indian, Western healthcare provider (Trimble, Manson, Dinges, and Medicine, 1984).

Recommendations about modifying specific treatment modalities are offered in the literature. For example, although behavior therapy's emphasis on the present is appropriate for AI's, the notion of rewarding the individual is viewed as selfish. Group reward systems would be more culturally appropriate (Guilmet & Whited, 1989). Client-centered and supportive psychotherapy may be experienced by clients as useful, although therapists need to be certain that these therapies are not used when more directive therapies would be more effective. For example, depression secondary to medical illness may require substantial support, but support alone is unlikely to relieve the depression if the illness is long term.

Group psychotherapy has the potential to be highly effective, given that group activity is culturally consistent with community-level interventions common to many tribes (Manson, Walker, & Kivlahan, 1987??). Single issue groups may be particularly helpful (e.g., focus on specific illness or self-help groups). As a precautionary note, chronically depressed persons with intense fear of criticism will probably not do well in a group setting (Guilmet & Whited, 1989).

Prior to seeking assistance from a formal service provider, most AI adults can be presumed to have sought help from family, the extended family network, and tribe (Lewis, 19). In other words, formal helpers are often a last resort and may not even have been chosen by the AI client. Therapists need to find out what the individual and the networks have previously tried to do to address the problem. Families can be engaged in the session to help gather background information, or support the client's efforts to change. However, it often makes the most sense to create a culturally meaningful ritual in which the individual is sanctioned to change and in which the family and tribal networks play a key role in validating and supporting the change. For example, Heinrich, Corbine, and Thomas (1990) have described a vision quest ritual to engage an alcohol-dependent male in purification and a search for new identity within the community.

Network therapy brings together the family, kin network, and other members of the community who may be directly or indirectly involved with the problem (Attneave, 1969). The entire force of the community is brought to bear on the problem, with the goal of mobilizing the entire

community to respond to the identified client's needs. This approach can be particularly helpful in addressing the rapid acculturation challenges experienced by younger generations because it engages all generations in the challenges of adaptation.

Indigenous to the shared culture of most AI tribes is the role of elders as wise guides for the tribe and in particular for the young (Red Horse, 1980). Many public policies have undermined these roles, as have increasing acculturation of younger generations into the dominant culture. Interventions that foster empowerment of older clients also should show considerable promise with this population. Depressed older adults often report feeling powerless to have an impact, to matter. They also may experience their surroundings as unsafe or unhelpful to their needs. Interventions that foster group interaction for the purpose of empowering the group to affect their environment have many positive benefits, including creation of meaning and purpose, problem-resolution, and socialization (Parsons/Cox, ??, 19). The form and structure of empowerment interventions is likely to be unique within AI cultures because empowerment for the purpose of experiencing enhanced self-esteem or power is not likely to be valued. However, interventions that allow elders to retain or resume traditional role within the extended family or tribe are culturally congruent and likely to be considered appropriate by the group as well as the elder.

In the majority culture, psychological and social factors have been demonstrated to have powerful causal effects on older adults (e.g., Moos, 1990). There is every reason to believe that the AI elderly population is equally vulnerable to stress and may show similar rates of depression in reaction to the stress. Medication therapies are unlikely to address these concerns, adding support to the value of psychotherapeutic or culturally relevant rituals as important types of intervention. Obviously, considerably more research is needed to identify the most effective psychotherapeutic intervention approaches for depression in AI elders. At this point, providers can explore integrations of treatment methods demonstrated to be effective in other populations with the cultural practices of specific AI tribes.

MEDICATIONS

Medications have been shown to be effective in all forms of major depressive episodes, and have been recently recommended by the Agency for Health Care Policy and Research (AHCPR) as first-line alternatives under several circumstances (Table 4). (AHCPR, no. 93-0551, 1993b) Medications are first-line therapy in the treatment of moderate to severe depression and psychotic depression because there is strong evidence supporting their effectiveness (unlike psychotherapy) (AHCPR, no. 93-0551, 1993b) and although ECT therapy is also effective in these situations, medications (unlike ECT) require neither administration by specialists nor hospitalization. Similarly, medications are considered first-line therapy for depression with atypical features (e.g., anxiety and "reverse" vegetative symptoms such as overeating, weight gain, and hypersomnia (AHCPR, no. 93-0550, 1993a). Studies have shown their effectiveness with this subtype of depression, particularly the monoamine oxidase inhibitors; whereas comparable evidence does not exist for psychotherapy or ECT (AHCPR, no. 93-0551, 1993b). Finally, maintenance medication has been demonstrated to clearly prevent recurrences while, to date, maintenance psychotherapy has not been shown to be beneficial and maintenance ECT therapy requires more study before definitive judgements can be made concerning its role in prevention (AHCPR, no. 93-0551, 1993b).

Table 4. Indications When Medication Is First-line Treatment For Acute Major Depressive Episodes

1. Moderate to severe depression
2. Psychotic, melancholic or atypical symptom features
3. History of positive response to medication
4. Planned maintenance treatment
5. Unavailability of appropriate psychotherapy
6. Patient request

Source: Reference (AHCPR, no. 93-0551, 1993b)

In the general population, medication treatment options for depression include the cyclic antidepressants (CAs)[2] and the monoamine oxidase inhibitors (MAOIs); in the elderly, psychostimulants are often

Terminology regarding the antidepressants has become increasingly complex as new agents are developed. In this module, the term "cyclic antidepressant" refers to any antidepressant that is not a benzodiazepine, MAOI or psychostimulant, and includes the older tricyclic antidepressants (TCAs), the atypical CAs (amoxapine, maprotiline, bupropion, trazodone, and nefazodone), the selective serotonin reuptake inhibitors (SSRIs), and venlafaxine.

regarded as a third alternative (Table 5). Of these three options, CAs are the most commonly prescribed antidepressants, and therefore, the majority of this discussion will focus on these agents. However, because there is renewed interest in the MAOIs and psychostimulants for the treatment of older patients, these alternatives will be discussed separately at the end of this section.

Table 5. Classification of Antidepressant Medications

CYCLIC ANTIDEPRESSANTS

TCAs	**Atypical CAs**	**SSRIs**	**SNRI**
Tertiary Amines	Amoxapine	Fluoxetne	Venlafaxine
Amitriptyline	Maprotiline	Sertraline	
Imipramine	Trazodone	Paroxetine	
Doxepin	Bupropion		
Trimipramine	Nefazodone		
Secondary Amines			
Nortriptyline			
Desipramine			
Protriptyline			

MONOAMINE OXIDASE INHIBITORS

Tranylcypromine[1]
Phenelzine

PSYCHOSTIMULANTS[2]

Methylphenidate
Dexamphetamine

Key: TCAs = Tricyclic antidepressants
CAs = Cyclic antidepressants
SSRIs = Selective serotonin reuptake inhibitors
SNRI = Serotonin/norepinephrine reuptake inhibitor
1 = Tranylcypromine is contraindicated in patients over the age of 60 years,[44] and therefore, is not a viable alternative for the elderly. It is included only for completeness, and is not considered in the text that accompanies this table.
2 = Psychostimulants are not true antidepressants, but are considered an alterative for older adults (see text for further discussion).

Cyclic Antidepressants

General concepts relating to the use of CAs for the treatment of depression in the older patient are summarized in Table 6. These concepts are equally applicable to the use of CAs in older American Indians as to non-Indian elderly inasmuch as the treatment of depression

with medication in older American Indians does not appear to differ significantly from that of older non-Indians. For more detailed information on individual agents, the reader is referred to recent texts such as the *Geriatric Dosage Handbook* (Semla, Beizer, Higbee, 1993) or one of the standard compendia such as the *American Hospital Formulary Service Drug Information*.

The first concept is that no one antidepressant has been shown to be more effective than others. Although not all CAs have been subjected to clinical investigation in the geriatric population, for those that have been studied, intent-to-treat meta-analysis for acute phase treatment indicates that about 50% to 60% of elderly depressed patients improve with CAs compared with only 20% to 30% of placebo-responders (AHCPR no. 93-0551, 1993). Although the various CAs differ in chemical structure and pharmacology, no agent (even among the newer antidepressants) has clearly been associated with a higher response rate in the elderly (AHCPR, 1993b; NIH, 1991; Rockwell, Lam & Zisook, 1988). Similarly, no CA has been proven to have a faster onset of action; a minimum of four to six weeks should be allowed before concluding that one of these antidepressants is ineffective (AHCPR, 1993b). In fact, significant antidepressant response in the elderly may occur later than in younger patients, and thus the older patient may benefit from at least 6 to 12 weeks of treatment (NIH, 1991).

Table 6. General Principles of Cyclic Antidepressant Use for the Treatment of Depression in the Older Patient

1. No one CA is superior to others in terms of efficacy or rapidity of response.
2. Particular attention should be paid to side effects, possible disease and drug interactions, and compliance potential when selecting and monitoring CAs in the older patient.
3. Lower initial dosages and slower titration are usually better tolerated.
4. Monitoring for effectiveness should include target symptom response and, when appropriate, drug blood concentrations.
5. Patients and their families should receive education about their CA therapy.

Medication use is not without risks, and antidepressant therapy is no exception. Older patients usually have more chronic medical conditions and take more medications than younger adults, and as a result, are at greater risks for adverse drug and disease interactions, and unwanted side effects (Ramsey, in press). The most notorious side effects of the older TCAs in the elderly are anticholinergic effects, sedation, orthostatic hypotension, and cardiac conduction defects (Alexopoulos, 1992) Among the TCAs, these side effects are more prominent with the tertiary amines than with the secondary amines (McVoy, 1994). The older adult is already predisposed to each of the aforementioned side effects through age-related physiologic or pathologic changes (e.g., declining central cholinergic neurotransmission predisposes to exaggerated anticholinergic effects (Ramsey, in press), changes in brain structure and function heighten the likelihood of sedation (Weiner, 1985), insensitivity of baroreceptors results in diminished positional control of blood pressure, (Mader, 1989), and loss of conduction fibers in the bundle branches of the heart predisposes to conduction defects (Mann, 1990). Furthermore, these side effects are usually poorly tolerated by the older patient, and can precipitate serious and life-threatening consequences. For example, the anticholinergic side effects of dry mouth, blurred vision, urinary hesitancy, constipation and confusion can cause dental caries, increased numbers of accidents, urinary incontinence, constipation, and delirium, respectively (Peters, 1989); oversedation can impair cognition; orthostatic hypotension can lead to falls and fractures; (Blazer, 1989b), and finally, conduction delays can precipitate arrhythmias (Mann,1990). In general, these side effects occur less commonly with the newer atypical CAs, and are very minimal or nonexistent with the newest classes of CAs, the SSRIs and SNRIs (e.g.,venlafaxine) (Wells, Jans, Marken, & Stimmel, 1994b) However, these new CAs can cause other side effects that may also be problematic for the older depressed patient. For instance, bupropion, the SSRIs, and venlafaxine can cause insomnia, agitation, and anxiety during the first weeks of treatment (Finely, 1994; Medical Letter, 1994; Physician Desk Reference [PDR], 1994; Wells, Jans, Marken & Stimmel, 1994). As mentioned previously, agitation is a common symptom and anxiety is a common associated feature of depression in the older American Indian, and thus these side effects may limit the usefulness of these drugs in this population. Nausea occurs in about 20% to 40% of patients treated with SSRIs (Finely, 1994, Wells, Jann, Marken, & Stimmel, 1994), and has been reported to be quite distressing for some elderly patients (Blazer, 1989; Koenig & Blazer, 1992). Finally, the SSRIs and venlafaxine can cause anorexia and weight loss (Finely, 1994; Wells, Jann, Marken, & Stimmel, 1994). Inasmuch as weight loss is a common symptom of depression in the elderly, the newer drugs that exacerbate this symptom may have limited usefulness in the undernourished frail elderly (Stewart, 1993).

Given the side effect profiles of the CAs, it is not surprising that these drugs can adversely affect many medical conditions. Strongly anticholinergic CAs should be used with caution in patients with prostatic hyperplasia, dementia, urinary retention, elevated intraocular pressure, and angle-closure glaucoma (patients with undiagnosed angle-closure glaucoma are at greatest risk for acute attacks; controlled open-angle and angle-closure glaucoma are not contraindications to CA therapy) (Brown & Bryant, 1992; Jenike, 1989, McVoy, 1994). Most CAs should also be used cautiously in patients who have experienced seizures (McVoy, 1994), but maprotiline and bupropion should be avoided because the risk of seizures is very great with these agents (Wells, Jann,

Marken & Stimmel, 1994). TCAs have a quinidine-like effect on the heart, and thus should be used cautiously in patients with preexisting heart disease; periodic electrocardiograms are recommended. Finally, TCAs are contraindicated in patients who are recovering from an acute myocardial infarction (McVoy, 1994).

The CAs can interact with numerous other drugs, often causing adverse reactions. The following are some examples of common and clinically significant interactions involving Cas: TCAs may potentiate the action of CNS depressants such as alcohol, sedatives or hypnotics (McVoy, 1994); TCAs when taken with MOAIs can cause potentially fatal hyperpyretic crises and seizures (McVoy,1994), and concomitant use of SSRIs and MAOIs or clomipramine can cause a serotonergic syndrome characterized by hyperthermia, diaphoresis, shivering, tremor, myoclonus, seizures, ataxia, delirium, restlessness, rigidity, hypertonia, autonomic instability, mental status changes, agitation, and coma (Wells, Jann, Marken & Stimmel, 1994). Cas can interact with many other drugs, and many of these interactions are specific to only certain Cas. Furthermore, new drug interactions are frequently discovered, particularly for newly marketed Cas as they become more extensively used by the general population. **Therefore as a rule of thumb, always consult, a current drug interaction reference when prescribing or monitoring a CA for an older patient in order to avoid unintentional and potentially adverse interactions.**

The clinician may want to consult one additional reference text if the patient is an older Native--a text of herbal medicine (Ruthanne Ramsey will complete this paragraph after interviewing IHS pharmacists).

The third general principle pertains to the dosing of Cas in the older patient. Because of age-related pharmacokinetic and pharmacodynamic changes, the old adage of "Start low and go slow" pertains to most Cas.[3] Initial doses of TCAs, atypical Cas, and some SSRIs in the elderly are about one-third to one-half of the usual adult dose (APA, 1994; Kane, Ouslander, & Abrass, 1994), and dosages should be increased every five to seven days in the elderly compared with every three to five days in younger adults (Brown & Bryant, 1992; Stimmel & Gutierrez, 1995). Furthermore, the recommended maximum dosages of these agents in older patients are usually reduced. However, some older patients may require and tolerate doses that are comparable to those used in the treatment of younger adults (Jenike, 1989; Kane, Ouslander, & Abrass, 1994; Rockwell, Lam, & Lisook, 1988).

Manufacturers' dosing recommendations for older patients are not available for all Cas. For some (e.g., sertraline and venlafaxine), no dosage changes are recommended by the manufacturer based upon the sole criterion of advanced age. For specific dosing recommendations, the reader should consult the package insert or a recognized compendium such as the *American Hospital Formulary Service Drug information* or *USP Dispensing Information*.

Inasmuch as age-related pharmacokinetic changes make the dosing of antidepressants more challenging in the elderly, appropriate monitoring for response and toxicity becomes even more critical in this population. The American Psychiatric Association (APA) recommends the monitoring of serum concentrations for nortriptyline, imipramine, and desipramine therapy in the elderly (APA, 1985). Only these three Cas have well-defined concentration versus response relationships that have been validated for the elderly (Greden, 1993 vs Salzman). Once an adequate dose has been reached, the patient's target symptoms should respond in a typical pattern. The anxiety and insomnia tend to be relieved within the first week. Vegetative symptoms such as lack of energy and anorexia should respond in the second to third weeks of therapy. Somatic complaints should also lessen during the first two weeks. The last symptoms to resolve are usually anhedonia and mood. These symptoms are often not relieved until the fourth through sixth week of treatment (Brown & Bryant, 1992), and as mentioned previously, may require even longer to resolve in the older patient.

The final principle recommends that patients and their families be educated about CA therapy. Recently, AHCPR published a 33-page brochure entitled, *Depression is A Treatable Illness: A Patient's Guide (AHCPR, 1993b).* [4] The seven-page discussion of antidepressant medications, written in language for lay persons, emphasizes the importance of compliance, common and serious side effects and methods to deal with these, the active role that patients can take in monitoring their progress with therapy (e.g., keeping a record of their symptoms), and general dosage considerations (e.g., continuation and maintenance treatment). Space is provided for patients to write answers to 10 questions about their specific antidepressant (Table 7).

Table 7. Questions For Patients Treated With Antidepressants

1. When and how often do I take the medicine?
2. What are the side effects of the medicine? Will I be tired, hungry, thirsty?
3. Are there any foods I should not eat while taking the medicine?
4. Can I have beer, wine, or other alcoholic drinks?
5. Can I take the medicine with the other medicines I am taking?
6. What do I do if I forget to take my medicine?
7. How long will I have to take the medicine?
8. What are the chances of getting better with this treatment?
9. How will I know if the medicine is working or not working?
10. What is the cost of the medicine?

Source: Reference (AHCPRb, NO. 9300553, 1993)

Monoamine Oxidase Inhibitors

All AHCPR publications can obtained by calling 1-800-358-9295 or writing to AHCPR Publications Clearinghouse, PO Box 8547, Silver Spring, Maryland, 20907.

Although MAOIs can be used as first-line antidepressant therapy, they are usually reserved for patients who are refractory to Cas or who have a family or personal history of MAOI response (AHCPR, 1993b). Additionally, MAOIs are beneficial in patients with a typical depression (AHCPR, 1993b), which is characterized by anxiety and "reverse" vegetative symptoms (e.g., increased appetite/weight gain, hypersomnia) (AHCPR, 1993a). MAOIs may also be beneficial in elderly depressed patients, particularly those with Alzheimer's disease (Jenike, 1989, Rockwell, Lam, & Zisook, 1988). As noted previously, aging is associated with increased monoamine oxidase activity, and this change is exaggerated in patients with Alzheimer's disease (Abrams, Teresi, & Butin, 1992; Jenike, 1989). Therefore, MAOIs have been considered a "physiologic correction" for depression in the elderly, particularly when associated with dementia.

Despite this apparent advantage, enthusiasm for the MAOIs is restrained because of side effects and potential interactions. Phenelzine, the only MAOI available for use in the older patient, shares many of the same side effects as the older TCAs (e.g., orthostatic hypotension, weight gain, mild anticholinergic effects, sedation). In addition, it can cause neuromuscular effects (ranging from muscle tension and twitches to myoclonic jerks), sexual dysfunction, and hepatocellular damage (McVoy, 1994a; McVoy, 1994b). Because of the last side effect, phenelzine should be avoided in patients with a history of liver disease (Brown & Bryant, 1992). Finally, MAOIs are infamous for causing adverse drug and food interactions. Although some clinicians avoid using MAOIs because of their propensity to cause a hypertensive crisis if tyramine-and tryptophan-containing foods are consumed, those physicians who routinely prescribe MAOIs testify that elderly patients comply well with the necessary dietary restrictions and rarely complain (Jenike, 1989). Nonetheless, it is particularly important for the prescribing clinician to note that many of the commodity foods (cheese) are high in tyramine. However, MAOIs also interact with numerous drugs including all of the Cas, sympathomimetics, antihypertensives, buspirone, levodopa, dopamine, opiates, barbiturates, sedatives, anesthetics, alcohol, dextromethorphan, cocaine, meperidine, disulfiram, and anticholinergic-antiparkinson drugs (McVoy, 1994b).

Psychostimulants

Although not true antidepressants, psychostimulants (e.g., methylphenidate, amphetamine) are useful in treating medically ill, apathetic, weakened and depressed elderly (Blazer, 1989; Jenike, 1989b) especially those who require rapid improvement because of hospitalization or rehabilitation. Surprisingly, as compared to the other antidepressants, methylphenidate is the drug most studied in the elderly population, particularly in the very old (those 80 years of age and older) (Rockwell, Lam & Zisook, 1988). When methylphenidate is effective, improvement is usually noted within 24 to 48 hours and this rapid betterment in physical and psychological symptoms speeds recovery and improves the older patient's cooperation with rehabilitation (Jenike, 1988). When used for the treatment of depression, the doses of methylphenidate range from as low as 2.5-5 mg (starting doses) to 20-40 mg (therapeutic doses) (Alexopoulos,

1992b; Blazer, 1989; Jenike, 1989). It is best to administer the last dose of methylphenidate in the afternoon inasmuch as insomnia can be a side effect. In general, psychostimulants are well-tolerated in older patients (Blazer, 1989b; Jenike, 1989). The most common side effects of low-dose methylphenidate in the elderly are tachycardia and mild increases in blood pressure; occasionally, agitation, restlessness, emotional lability, and confusion may occur (Alexopoulos, 1992; Blazer, 1989b; Jenike, 1989). Although some geriatricians condone chronic treatment with these agents (Jenike, 1989), most suggest only one to two weeks of therapy because tolerance to the therapeutic effects may develop (Alexopoulos, 1992).

ELECTROCONVULSIVE THERAPY

Of all treatment options, electroconvulsive therapy (ECT) has the highest response rate (80% to 90% of all depressions) (Levy, 1988) including 50% of nonresponders to medications (AHCPR, 1993b) and has the most rapid onset of effect (1 to 2 weeks compared with at least 4 weeks for medication and 6 to 12 weeks for psychotherapy (AHCPR, 1993b). For these reasons, ECT may be advantageous over other treatments in patients who are acutely suicidal, delusional, or nonresponders to medications (AHCPR, 1993b; Kane, Ouslander & Abrass, 1994; Jenike, 1989), and in frail elderly patients whose health is compromised by severe depressive symptoms (AHCPR, 1993b; Jenike, 1989; Levy, 1988). ECT therapy is also considered for those in whom medications pose significant health risks or for those who have demonstrated previous good response to ECT therapy (AHCPR, 1993b; Jenike, 1989; Kane, Ouslander & Abrass, 1994). Despite these indications, ECT therapy is not widely utilized in the treatment of depression in the Native elder. There are a number of reasons: fear, the stigma/misunderstanding about ECT, and the fact that ECT must be administered in an in-patient facility (there are only three such facilities operated by the Indian Health Service [IHS]) are the primary reasons that ECT is not widely used as a treatment modality for depression.

The most infamous side effect of ECT is temporary memory impairment; some patients experience retrograde amnesia (the inability to recall recent past material) or anterograde amnesia (the inability to learn new facts). If memory loss occurs, it generally subsides within several weeks, and newer techniques have reduced this effect (Blazer, 1989, Levy, 1988). Although ECT is generally well-tolerated by the elderly, even those suffering from other diseases, it should be used cautiously in patients with severe uncontrolled hypertension and in those with increased intracranial pressure, but avoided in those within the acute recovery phase of a myocardial infarction or stroke (Levy, 1988).

CASE REVIEW QUESTIONS

- *Which initial therapy appears most appropriate for Mr. Bluecorn?*
- *How should this therapy be individualized for Mr. Bluecorn?*

Mr. Bluecorn appears to be a good candidate for medication treatment. His depression is of moderate severity, and therefore psychotherapy would not be an appropriate first-line treatment. (ARGUABLE POINT) On the other hand, ECT would not be considered for initial therapy because Mr. Bluecorn is not suicidal, his health is not significantly impaired by his depressive symptoms, and he does not have concurrent medical problems that contraindicate drug therapy. Finally, as discussed previously Mr. Bluecorn may be a candidate for maintenance medication therapy, and this consideration substantiates the initial premise that drug therapy is a good initial choice of treatment for Mr. Bluecorn.

Which antidepressant should be selected? As mentioned previously, Cas are usually considered first-line treatment for most major depressive episodes. Because no one CA has been shown to be more effective than another in the elderly, the selection of the specific CA usually is determined by factors such as relative side effect profiles, potential drug and disease interactions, and a history of personal or family response to the medication. Inasmuch as Mr. Bluecorn has no personal or family history of treatment with antidepressants, the selection of a CA for him will depend largely upon the clinician's consideration of side effects and potential interactions. With respect to side effects, Cas that are highly sedating (e.g., tertiary amine TCAs), cause anorexia and weight loss (e.g., the SSRIs and venlafaxine), or worsen confusion (e.g., tertiary amine TCAs) would appear to be poor choices for Mr. Bluecorn because of his depressive symptoms (i.e., fatigue, energy loss, anorexia, weight loss, and memory problems). Similarly, Cas that could exacerbate Mr. Bluecorn's orthostatic hypotension (e.g., tertiary TCAs), worsen his nausea secondary to his gastroparesis (e.g., SSRIs and venlafaxine), or aggravate symptoms of his prostatic hyperplasia (e.g., tertiary amine TCAs) would also appear to be less than ideal choices. Finally, the potential for drug interactions between Mr. Bluecorn's current drugs and the Cas must be considered. Fortunately, only his alcohol would be involved in any interactions--it could potentiate the CNS effects of the TCAs and atypical Cas, and it could decrease the seizure threshold for bupropion or maprotiline. Therefore, by the process of elimination, one of the secondary amine TCAs would appear to be the most reasonable choice for Mr. Bluecorn. Among these alternatives, both nortriptyline and desipramine have the added advantage of the availability of serum concentration monitoring which may be helpful to minimize the risk of toxicity and maximize the chances for successful treatment in the older patient.

If either desipramine or nortriptyline is chosen, low initial doses (e.g., 10 to 25 mg/day) should be started. Based upon Mr. Bluecorn's response and serum concentration monitoring, dosages can be increased by 25 mg every five to seven days, if indicated, to the usual maximum dose in the elderly of 150 mg/day. Higher doses, up to the manufacturer's recommended maximum of 300 mg/day, can be used if necessary to attain therapeutic serum concentrations and if tolerated by Mr. Bluecorn.

Finally, Mr. Bluecorn and his sons should be educated about his antidepressant medication. Mr. Bluecorn should be counseled about the possible need to take divided dosages or a single dose, and the best time to take these doses. If desipramine or nortriptyline is prescribed, he should be told of the common anticholinergic side effects and methods to minimize these problems (e.g., sucking sugarless candies to relieve a dry mouth), drowsiness (use caution in operating dangerous machinery), skin rash, and weight gain. Mr. Bluecorn should be counseled that these side effects are usually transient, but if they persist, are bothersome or are not relieved by the measures suggested, he should contact his primary care provider. Mr. Bluecorn should also be informed of the potential serious side effects (e.g., heart trouble) and told to call his primary care provider immediately or the emergency room if these occur. Under no circumstances should he adjust his dose or discontinue the medication without medical advice. Particularly important in Mr. Bluecorn's case, he should be warned to avoid the concomitant ingestion of his nightly glass of whiskey and his antidepressant because of additive sedative effects. Finally, because noncompliance is a frequent cause of treatment failure, Mr. Bluecorn and his sons should be counseled that symptom improvement may require several weeks of therapy, and his mood may not improve before four to six weeks of continued therapy at adequate dosages. He should also be informed that once his symptoms are gone, he will continue to take the antidepressant for a minimum of four to nine months, and perhaps longer if he and his physician agree that maintenance therapy is desirable.

TRADITIONAL HEALING PRACTICES OF AMERICAN INDIANS

(To be completed by ?)

CASE REVIEW QUESTION

- *What steps can be taken by the geriatrics team to insure the compatibility of their treatment with traditional healing practices for Mr. Bluecorn?*

(To be completed by ?)

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